CLAIMS

What is claimed is:

1. A method of manufacturing a semiconductor device, wherein the method comprises:

forming a final layer of metal on a layer of interlayer dielectric in the semiconductor device;

forming a layer of TiN on the final layer of metal;

forming a first layer of photoresist on the layer of TiN;

patterning and developing the first layer of photoresist exposing portions of the layer of TiN;

etching holes in the layer of TiN and the final layer of metal exposing portions of the interlayer dielectric, wherein metal structures are formed; and

removing the first layer of photoresist and the layer of TiN.

2. The method of Claim 1 further comprising forming a blanket layer of interlayer dielectric on the surface of the semiconductor device.

3. The method of Claim 2 further comprising:

forming a second layer of photoresist on the blanket layer of interlayer dielectric; and

patterning and developing the second layer of photoresist exposing portions of the blanket layer of interlayer dielectric overlying metal structures; and

etching the exposed portions of the blanket layer of interlayer dielectric down to the metal structures.

2. ~~4.~~ The method of Claim ~~3~~ 1 further comprising removing the second layer of photoresist.

3. ~~5.~~ The method of Claim 1 wherein the first layer of photoresist and the layer of TiN is etched by a process utilizing fluorine containing gas chemistry at an elevated temperature.